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Strategic Alliances in the Printing Industry

By

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A thesis submitted in partial fulfillment of the
requirements for the degree of Master of Science
in the School of Print Media
in the College of Imaging Arts and Science of the
Rochester Institute of Technology

June 2006

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Abstract

Strategic alliance has been viewed as a management solution of companies. Printing companies have begun to adopt this method as a way to survive or strengthen their position. The purpose of this research was to determine an overview of the practice of alliances in the printing industry. This thesis focuses on strategic alliances and attempts to improve understanding on this subject by classifying and evaluating the current practice of alliances in the printing industry. The investigated areas are 1) the type of alliances that exist in the printing industry; 2) who is entering into the alliances; and 3) the intention of companies to establish alliances. These areas were investigated and specific information is provided about the current practice of strategic alliances in the last two years (2004-2005). To gather this information, the database was searched, and 116 related articles were found.

The results reveal that more than 200 companies engaged in alliances within the last two years. The alliance types found were outsourcing, contractual agreement, joint venture, and acquisition. The most frequent types of alliance are acquisition (47%) and contractual agreement (37%). The purposes for companies to enter into alliances include acquiring technology, research and development, manufacturing, global penetration, market expansion, and growth strategy. Companies not only align with others of the same type, but it also appears that they would like to build networks across the industry. Most joint ventures are established with overseas partners because they would like to establish

a presence abroad. Outsourcing found included printing services, IT services, and document management services. Most companies that enter into contracts are print service providers and publishers. Most of the companies who engage in acquisitions are larger print service providers who acquire smaller print service providers.

An analysis of the alliances was conducted, and one alliance was chosen to be closely investigated. ColorCentric Corporation and Lulu.com were selected because their strategic alliance represents a breakthrough in the printing industry. The interviews were conducted with the president of ColorCentric Corporation. The strategic alliance between ColorCentric Corporation and Lulu.com offers great advantages for both partners. ColorCentric Corporation gained a customer base provided by Lulu.com, and at the same time Lulu.com focused on its core competency without investing in printing equipments.

All in all, numerous of alliances have been established in the printing industry and are predicted to increase.

Chapter 1

Introduction

Statement of Problem

Today's print market operates under rough conditions. Buyers demand competitive pricing, high quality, and fast delivery. Electronic media continues to steal market share. Strategic alliance or partnering with others is a solution many printers use in the hope to improve their business prospects.

Print buyers are interested in establishing relationships with printing companies that can manage the entire print process, from storing digital assets and warehousing printed materials all the way through to distribution. Many business strategies can be applied in the print market: building relationships, listening to clients, diversifying their services, forming alliances, or focusing on core competencies. "Printing companies wanting to get into distribution can find organizations that specialize in print fulfillment, distribution, and warehousing . . . Only a decade ago, a company would have to build this type of service itself" (Cross, 2003).

According to Aranoff and Fitzpatrick (2004), there is recent evidence of a growing number of client situations in the printing industry in which companies are:

- Seeking strategic partners to provide original equipment manufacturing products for distribution,
- Finding partners to develop joint product solutions for a new marketplace, seeking to license new technology, or to license their own technology to another

company, or

- Looking for financing/equity to enable the company to continue to grow.

Reported by Frank (2003), the figures from NAPL shows that 5,000 printers have gone out of business in the last five years, and 5,000 more are expected to shut down by 2007. Mergers and acquisitions bring success to companies and there are benefits to teaming with another company to become better and stronger. This whole business is about service and working on relationships. Strategic alliance is key to this, and becoming aligned is a trend.

Technology in the printing industry is constantly changing. A decade ago the industry was structured using traditional workflow with conventional printing and labor. Now automation takes the lead and print on demand is growing. Offering new services means making capital investment in new equipment and acquiring new knowledge. Printers realize that this task is not easy for them to achieve in a short period of time. This leads to partnering options where they can obtain available resources from the partner immediately (Cross, 2003).

Background and Present Significance

“Strategic alliances” have been the subject of much business research in recent decades. Scholars from a variety of backgrounds have chosen strategic alliances as an area for scholarly inquiry, reflecting the fact that strategic alliances themselves have grown considerably in number and importance for many organizations (Gulati, 1999). Strategic alliance is defined by Yoshino (1995) as “a joint effort by two or more companies linked together in the supply chain to reduce the total cost of acquisition,

possession, and disposal of goods and services for the benefit of all parties”. Strategic alliance, joint ventures, corporate partnerships and other joint efforts among companies are currently used in the marketing, advertising and media industries (Ross, 2001).

Alliances are collaborative structures between one or more autonomous companies in which they share risks and revenues with the purpose to mutually gain a stronger competitive position. The average number of alliances between firms has been growing steadily over several years (Pieter de Man, 2002). In the year 2000, the number of strategic alliances was more than 10,200 in the US. It is estimated that US firms with \$2 billion or more in revenue each formed an average of 138 alliances between 1996 and 1999 (Schiffrin, 2001), and according to the *Statistical Handbook for the Graphic Arts Industry* (2002), the value of assets acquired in mergers and acquisitions of printing, publishing and allied services has accounted for almost \$1.6 billion.

For example, R. R. Donnelley, one of the biggest commercial printers, has long been involved in strategic alliances to expand its company. Its numerous partners help fulfill and add more value to the company, offering products and services, and include different types of companies such as digital printing and document solutions firms.

Not only commercial printers, but also equipment suppliers like Kodak have become engaged in strategic alliances. To achieve low cost production, Kodak allies itself with manufacturers in China to outsource key components. As a result, all of its cameras are made overseas. Kodak’s strategy of combining off-the-shelf chips, proprietary software and outsourced manufacturing is being imitated elsewhere (Wehner, 2005).

In the year 2004, the mergers of large companies in the printing industry became common. Examples include the merger and acquisition of companies like Kodak

acquiring Creo, and R. R. Donnelley merging with Moore Wallace.

The Reasons for Interest in the Study

The printing business has been viewed as a commodity business. To differentiate themselves from others, some printers offer more value-added services to customers. In order to be able to offer more products or services, printers ally themselves with other companies to acquire resources that they need to help them achieve their goals.

The author is interested in studying strategic alliances in the printing industry for several reasons. Even though strategic alliances have existed in various industries, little research has been devoted to the printing field. According to Cross (2003), industry observers note a rise in developing unique and highly creative partnerships. Yet, due to competitive reasons the features of those business agreements are veiled in secrecy.

This study will benefit readers who are interested in the evolution of the printing industry driven by the alliances trend. Having been involved in a family business in prepress, paper and machine equipment suppliers, the author has been exposed to various types of strategic partnerships among organizations. Applying business contexts in graphic arts research is always a passion, as the author has a background in business.

Within a highly competitive environment where technology allows the process to be faster, firms seek to survive by going offshore, offering value-added services, acquiring digital printing, and so forth. To expand the business further, to cover all areas of print service or to ally with other companies, is a crucial step for many companies. The author wanted to focus this study mainly on a management level and hoped to acquire an in-depth level of knowledge relating to strategic alliances in the printing industry.

From this study the author was hoping to understand this strategic trend in the printing industry and the types of alliances. To be able to understand the whole structure was challenging and the result will contribute to our knowledge of the printing industry.

Chapter 2

Review of the Literature

Introduction

The idea of inter-organizational relationships was first introduced in organizational literature in the late 1960s. However, companies have only just realized the capability of strategic alliances as a way to acquire desired technology. Strategic alliances were only considered as an alternative approach to mergers and acquisitions. Nevertheless, in the 1980s the fast growing pace in the amount of latest found strategic alliances led to a dramatically rising body of literature on the exercise and formation of such arrangements. Today, strategic alliances have become one of the most favored practices in the fields of strategic management, international business studies, and industrial economics as well as in organization studies (Duysters 1999).

Strategic alliances are playing more roles in organizations within the corporate world, and between corporate entities because hardly any firms can afford all the advance technology and the expertise they need to react to emerging needs. The success of these alliances expands new horizons for participating partners: new products and services, new markets, and access to resources. “The strategic relationships being established today called by such names as partnerships, joint ventures, licensing agreements and the like are forming whole new industries. They represent efforts to combine the best available resources, to take advantage of openings in a global marketplace, and to add value in unbounded enterprises” (Barguest, Betwee, Meuel, 1995).

This literature review chapter is designed to cover literature from various authors in the area of strategic alliances and partnerships. It will cover definitions, types, primary drivers of strategic alliances, benefits, success and failure rates, risks, and alliances management. It will also suggest a model framework for categorizing alliances.

Definition of Strategic Alliance

Davies (2001) defines a strategic alliance as “a less-than-arm’s-length relationship between corporations that is characterized by a merging of complementary interests, the sharing of privileged information, and intimate collaboration and cooperation to achieve strategic goals and objectives.” He also recommends that the term “strategic alliance” has been used loosely to cover sales, supply, distribution, licensing, financing and other contractual relationships.

According to Vaughan “a strategic business alliance is a formal and mutually agreed upon collaboration between companies where partners pool, exchange or integrate specific resources for mutual gain, yet, in most circumstances, remain as separate businesses.” In the same vein, Yoshino (1995) defines the term strategic alliance, as “ a joint effort by two or more companies linked together in the supply chain to reduce the total cost of acquisition, possession, and disposal of goods and services for the benefit of all parties.”

Types of Alliances

There are many different ways to classify alliances.

By degree of integration

To some degree, most alliances result in the virtual integration of the parties through contracts that define rights, roles and responsibilities over a period of time, through partial equity ownership, or through the purchase of non-controlling equity interests. Many result eventually in integration through acquisition. Figure 1 shows the continuum of inter-corporate transactions types displayed by the level of commitment and degree of integration between the parties.

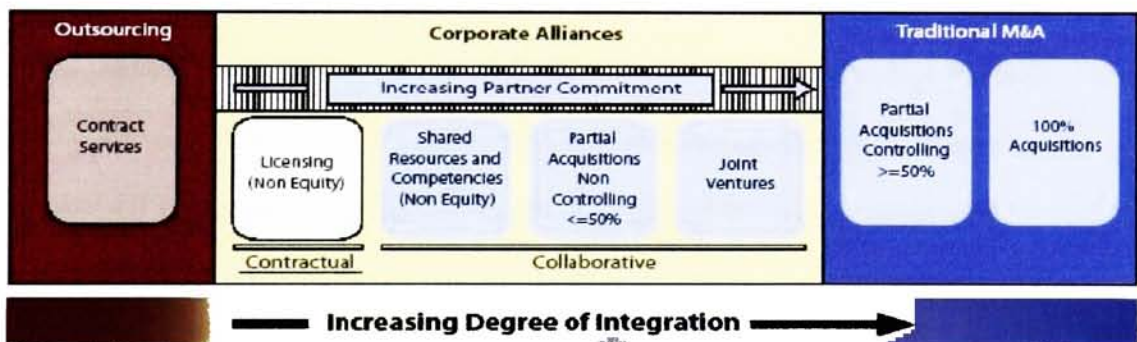


Figure 1. Alliance types by degree of integration

Source: Pekar and Margulis (2003)

The two opposite ends show the outsourcing as the least involved at the far left and the other end at the far right as the traditional merger and acquisition. This complexity also shows corporate alliances in the middle of outsourcing and acquisition. Not every relationship is a true alliance; suppliers, customers and all participating parties

in business are not always “partners”. Outsourcing is often defined as the delegation of non-core operations or jobs from internal production within a business to an external entity (such as a subcontractor) that specializes in that operation (Wikipedia, 2006). Contractual alliances like licensing are carried out with little cooperation. Contractual alliances are the first step and usually can be ultimately developed into a more permanent, equity-based structure. Collaborative alliances include shared resource arrangements, partial acquisitions and joint ventures. New projects and R&D resources are examples of shared resource arrangements. A joint venture is when two or more companies, usually of similar size or value, form a new entity to utilize a business opportunity that neither could do alone (Pekar and Margulis 2003). Mergers and acquisitions or (M&A) refers to the facet of corporate business strategy and management dealing with the merging and acquiring of other companies as well as assets (Wikipedia, 2006).

Apart from alliances being classified by degree of integration, Hutchison & Mason, PLLC Company (2001) categorize them into three main forms. These are *contractual arrangements* (licensing, marketing agreements, and development agreements), *minority equity investments*, and *joint ventures* (corporations, limited liability companies, or partnerships). The simplest form of strategic alliance is a contractual arrangement. Typically contractual-based, strategic alliances are short-term agreements which work best when there is no mandatory or a formal management structure. The second type of strategic alliance is the minority equity investment which has increased in frequency in the present economy. The equity investment in many circumstances is accompanied by a contractual arrangement between the parties such as a license agreement or a distribution agreement. This type of strategic alliance can also be

viewed as validating an early stage of a company's technology and business model. Not only the strategic commercial partner may desire this form of alliance to gain a competitive advantage through access to new technologies, they may also wish to share in the benefit of the other party's business through equity ownership. The most complex form of strategic alliance is a joint venture. A joint venture involves creating a separate legal entity (generally a corporation, limited liability company, or partnership) through which the business of the alliance is conducted.

As opposed to the aforementioned classification of alliance types, Michigan District Export Council (2005) argues that a joint venture is not a type of strategic alliance. Strategic alliance is a more specific type of company relationship than the joint venture or a typical exporter-distributor or licensing arrangement. Companies can enter into a strategic alliance for a temporary, one-time deal activity, or it might focus on just one part of a business, or its objective might be to jointly develop new products for a particular market. The arrangement is not as formal as a joint venture agreement. Alliances are usually carried out with a written contract plus agreed termination period, and do not result in the formation of an independent business organization.

Many researchers have studied joint ventures, leading to contradictory points of view among them. A few argue that a joint venture is not a strategic alliance; some argued that joint venture is a traditional strategic alliance. Yet, most researchers classify joint venture as one type of strategic alliance.

Wallace (2004) defined a joint venture as the coming together of two or more independent businesses with the intention of achieving a specific outcome that would not have been achievable by any one of the firms alone. Bringing two totally separate

organizations together for a joint venture is usually more complicated than when several divisions of one organization decide to take on a project together. When truly independent companies are involved, differences in company values and cultures, business goals, management structures and many other factors will bridge together. Without the cooperation of either party, the mission cannot be achieved. Partnerships are not without their own challenges and risks if a company can achieve the mission by itself; thus little motivation exists for undertaking a joint venture. The key point that holds the joint venture together and motivates the partnering companies to get over the hurdles that are sure to appear along the way is the interdependence that exists when neither side can achieve the mission alone. The need to agree on the supporting elements of the business purpose is implicit in the requirement for a clearly defined business purpose.

The very crucial trend in strategic alliances types according to Pieter de Man (2002) is that firms increasingly enter into contractual alliances instead of joint ventures. Also, the number of equity relationship alliances is decreasing. The reason behind this is terminating contracts can be done much more easily and conveniently than selling an equity stake. Consequently, this trend becomes less noticeable because it results in difficulty of tracking the participating parties who work together.

A strategic alliance links specific aspects of the businesses of two or more firms. This link is a trading partnership that boosts the efficiency of the competitive strategies of the participating firms by providing for the mutually beneficial trade of technologies, skills, or products based upon them. “Mergers, takeovers, and acquisitions in which one firm assumes control of a new entity are not alliances. Overseas subsidiaries of multinational operations, even if they are joint ventures, are not alliances” (Yoshino

1995).

Drivers of Strategic Alliances

In the past several years, a number of hi-tech companies have jumped into strategic alliances. In some industries such as electronics, pharmaceuticals, computers, and aerospace, there has been as much as a fourfold annual increase. They have become the strategies of choice of industry leaders. IBM, for example, has used alliances in a variety of different areas and for a variety of different purposes. Marketing alliances have been established with networking companies, software houses, value-added retailers, and so on. Research and development alliances have been used in the memory business or as part of industry joint ventures. There have been alliances in new business areas like data networks and communications. The reason behind this type of activity is to experiment and expand by leveraging the many skills of many participants in the industry. Simply put, it is to harness the capabilities and the dynamism of a wide spectrum of players in order to do things it would be hard to do alone (Bleeke and Ernst 1993).

The printing industry partnering has by and large allied suppliers in the production chain. Printers have been uniting with prepress services providers, trade binders and trade printers, and other specialist services providers. This proves printing companies partnering with other companies without the ties of ownership is gaining acceptance among top executives.

Partnerships can take many forms, from two companies working together to share competencies to more complex relationships. These companies are driven to form the relationships with partners to extend their product offerings, reduce overhead and

production overcapacity, increase market share, and improve profits (Cross, 2003).

Firms in high technology fields have a much higher tendency to establish alliances comparing to low and medium technology sectors. There are two fundamental structural and technological key points accounting for the importance of strategic alliances for high-tech sectors. From the structural aspects “Fierce competition, the homogenization of markets and ongoing globalization tendencies account for most, whereas rapid growing capital and R&D costs, the ever increasing complexity of products, the emergence of the internet, and a significant increase in the speed of technological developments” are crucial drivers from a technological point of view (Duysters, 1999).

There are certain environmental conditions that drive the formation of alliances and explain the increased cooperation in the last decade:

- 1) Competitive boundaries are unclear due to technology advances that have created crossover opportunities merging once separate industries;
- 2) Communications advances such as voicemail, e-mail and e-Business facilitate the open communication between partners and the trend toward global markets link formerly distinct products, markets and geographical regions;
- 3) Rising demand of customers requires improved capabilities across the board, and a company has limited time or resources to either develop these themselves or acquire them;
- 4) There is an avid drive for technology standards and compatibility in a globally linked world;
- 5) Successful examples from a number of companies who scaled the alliance learning

curve and alliance formulation and execution has been ensured by a global body of expertise (Harbison, Pekar, Viscio and Moloney, 2000).

Sparling and Cook (1998) propose six primary drivers of strategic alliances.

The emergence of *globalization* facilitates logistic competence and reduces trade barriers.

Information systems capabilities makes integration of information systems of different organization possible and reduces transaction costs.

Quality/environmental systems such as HACCP, ISO 9000 and ISO 14000 change the way organizations think about internal operations and their relationships with partners.

The drive for ability to trace supply chains and product identity offers an added incentive for alliances. *Supply-chain management* maximizes performance across the network of organizations. High levels of commitment and cooperation among chain members becomes a supply-chain requirement. Organizations create longer term and closer relationships with both their customers and suppliers as they try to differentiate their products and deviate from the price dominated competition of commodities.

The fifth primary driver is *understanding core competencies and competitiveness*. A greater understanding of the role of core competencies has been developed among managers in corporate success. They have realized that competitiveness can be boosted by bonding complementary capabilities and competencies of different organizations in long-term and close relationships. Firms enter strategic alliances as part of corporate strategy and that strategy is being driven by several changes in the current operating environment.

The last driver factor is *national culture, policies and preferences*, where political barriers to ownership and market entry are reduced; also national and cultural differences

make strategic alliances become attractive vehicles for penetrating new markets.

Firms must constantly innovate to stay ahead the rivals throughout the world. They must develop new capabilities in a number of areas, ranging from technology development to manufacturing processes. Alliances allow firms to shape their competitive strategies in response to globalization (Yoshino, 1995).

Benefits of Strategic Alliances

Major benefits can be anticipated from a strategic alliance. Sparling and Cook (1998) states that the benefits are overcoming barriers, sharing risk, and bringing together complementary resources and capabilities.

Strategic alliances benefit technical and operational resources, especially for fast-growing companies. It allows companies to gain a competitive advantage through access to a partner's resources, including markets, technologies, capital and people. "Many fast-growth technology companies use strategic alliances to benefit from more-established channels of distribution, marketing, or brand reputation of bigger, better-known players. However, more-traditional businesses tend to enter alliances for reasons such as geographic expansion, cost reduction, manufacturing, and other supply-chain synergies." For midsize companies, it is necessary to be more careful about how and with whom they ally as the competition is increasing (Kotelnikov, 2005).

Doz and Hamel (1998) present the benefits of strategic alliances as co-option, co-specialization and learning and internalization. Co-option turns potential competitors into allies and providers of the complementary goods and services that allow business to develop. Co-specialization is the synergistic value creation that arises from the

combining of previously separate resources, positions, skills and knowledge sources. Partners contribute unique and differentiated resources, skills, brands, relationships, positions, and tangible assets to the success of their alliances, and alliances create value when those resources are co-specialized. Learning and internalization refers to how new sets of skills can be learned from a partner, internalized, and exploited beyond the boundaries of the alliance itself. The benefit of forming an alliance is that it can minimize investment risk for printing companies since new technology investment for printers can cost them a fortune.

Outsourced printing benefits printers because they can get a print job done on the most current equipment without the capital investment and expenses. There are a number of reasons not to run them in-house: cost, quality, consistency and, technology (Michelson, 2005).

Success and Failure Rate of Strategic Alliances

Determining the success of strategic alliances can be subjective. Being successful in strategic alliances has to do with alliance performance. Many researchers relate alliance performance with the effect of alliance capabilities. According to Draulans, De Man, and Volberda (1999) “an alliance capability can be defined as “the ability of an organization to manage alliances successfully.” They measure the success of alliances with three success indicators, which are economic, the extent to which the goals have been achieved and the relationship between partners.

Pieter de Man, Duysters (2002), has also suggested why there is an increasing number of researchers and managers directing attention to the alliance capability subject.

They argue that the top twenty-five firms of the Fortune 500 most active in alliances evidently outperform their competitors in terms of return on equity. This observation has a clear distinction of alliance performance between individual firms and implies that some firms are better able to manage their alliances than others, leading perhaps to superior financial performance.

Assessing alliance success has been altered from the traditional approach by giving attention to building up alliance capabilities. The traditional approach attempted to justify alliance success and failure by focusing on the alliance itself. Research issues were the organizational and cultural fit between the partners forming the alliance, the structure of the cooperation, the type of contract and the strategic goals. The traditional approach to alliance capability focuses on the internal organization of the alliance partners and the alliance knowledge accumulated inside the individual organization. It studies the ability of the individual partners to manage the relationship not the relationship itself, for example, the experience firms have with alliances, the knowledge they have built up about them and the alliance management tools they have implemented. (Gulati,1999)

Not only alliance capability indicates the success of strategic alliances. Lorange and Ross (1990) found that trust and commitment are the drivers of alliance performance. Duysters (1999) has collected the data in his extensive literature review on the failure rate of strategic alliances. He concluded that the failure percentage of strategic alliances is around 50%-60%, which is a rate between the optimistic and pessimistic conclusions of different authors. Pekar & Allio (1994) conducted a survey among capital firms, corporate development officers and investment bankers. They compared the failure rate of strategic alliances and the failure of mergers and acquisitions of these firms. The

failure rate of mergers and acquisitions was rated at 50% and strategic alliance is judged to be a failure at only 40%. Lorange and Roos (1993) favor the observations of Pekar and Allio, suggesting that some authors exaggerate the problems of strategic alliances. Successful firms can have success rates of 90%, while unsuccessful firms can have success rates as low as 30% (Booz Allen & Hamilton, 1998).

Pieter De Man and Duysters (2002) conducted a survey on success and failure of alliances among a variety of sectors of companies where 150 companies responded. In their study, the average success rate of alliances is 52%. This tends to be on the same page with most of the research. Alliances appear to surpass mergers and acquisitions where failure rates between 60 and 70% have been reported. There is the big gap in alliance success where 16% of the companies report 80% of their alliances fail while 15% of the companies report success rates of over 80%. This outcome indicates that alliance management is a crucial factor directing firms to be successful. Some firms are better at alliance management than others. The low success rates may not result from the natural complexity of alliances, but lack of alliance management skills. The success rate is not positively related to the size of the company, however; companies with more alliances tend to do better than companies with only a few alliances, indicating that experience in alliance management significantly influence alliance success rates.



Figure 2. Reasons for alliance failure
Source: Pieter de Man, Duysters (2002)

The reasons for alliance failure are shown Figure 2 above. Structural reasons rank in the top three, followed by reasons related to trust and culture. This shows the idea that alliance management requires a cautious balance between both aspects of management. The study shows that the percentage of alliance failure is 50%; however, companies still expect the alliance to become more significant in the next five years. One of the most interesting results of the project, as they mention is that companies' stock market value was increased by alliances on average 35%. (Pieter de Man, Duysters 2002).

One example of alliance failure is when IBM and Apple launched a strategic alliance and investments in joint ventures and research about a decade ago. Jointly, they determined to take on Intel and Microsoft. Unfortunately, the strategy did not work out. Other alliances formed at high levels with the label "strategic", have also failed to deliver. Consequently, alliances faded away several years later leaving only unfulfilled hopes, worn relationships and wasted effort. Analysts argue over what the cause was that ultimately led to failure. Some cite business conflicts and ruthless competition and others blame egos and differences in cultures. Yet, the failures have made one clear point: what matters is not the deal itself but the strategy behind them. Companies that succeed with

alliances always have to prioritize strategy first and deal-making second. Companies must find partners if they cannot gain a market share and strategic dominance consistently (Casseres, 2000).

According to a 1999 survey on global alliances by Accenture consulting, studies have found that as many as 70% of alliances fail. Although the fifteen most successful alliances increased shareholder value by \$72 billion, the fifteen least successful alliances decreased market capitalization by \$43 billion (Gonzalez, 2001).

Based on research by Mckinsey & Company consultants, two-thirds of alliances within the first few years face severe managerial or financial problems and only fifty percent are judged to be successful. These results have led to an average life expectancy of less than 3.5 years for most alliances (Underhill, 1996).

Strategic Alliance Risk

Das and Teng (1998) divide alliance risk into two categories: relationship and performance risk. They relate these two risks to four resources: financial, technological, physical and managerial. Relationship risk covers the risk associated with a firm's connection with external organizations. Performance risk appears in the alliance's interaction with its environment. Even if firms cooperate successfully there are still risks that the project will not succeed due to partner capability shortcomings, competition, or environmental changes.

The risks of strategic alliances include the loss of functional control and proprietary information and technology confidentiality. Some alliances can engage in a conflict of corporate cultures or the decrease of sovereignty. To avoid the risks, the parties should take into account a number of factors before they enter into a strategic

alliance, including the way to manage the relationship after the alliance is formed. The areas that should be considered are an array of accounting, antitrust, tax, and intellectual property subjects when configuring a strategic alliance. A well structured strategic alliance can bring numerous new opportunities and improve the parties' growth. Also, it can be a capital source during economic hardships. (Hutchison & Mason)

Underhill (1996) suggests that risks can range from an alliance partner who fails to conform to changes in management philosophy or key personnel. However, the biggest reason for failure tends to be that the alliance is not a win situation for both parties. Alliances must be created for the benefit of all parties but there is evidence that some alliances are misused and suppliers fail to supply all the promised services to customer requests. Companies need to understand each other's cost drivers in order to work together to improve satisfaction for both companies.

Alliance Management

Alliance Design

Alliance design is the set of features managers can choose that define where and how an alliance operates. Doz and Hamel (1998) has argued that the design of an alliance needs to take into account four related issues:

- *Operational scope* is comprised of the activities, tasks and operational domains that are combined in the alliance and the way they relate to the economic and strategic scopes within which the partnered activities fit.
- *Configuration and valuation of contributions*. Contributions may involve products, technologies, know-how, information, or management practices, taking into account the economic and strategic scopes of the partners and their learning from

each other.

- *Alliance governance* defines how an alliance is regulated by contracts and procedures, how it is managed and organized, and how the partners run and influence its progress and performance overtime.
- *Alliance interface* describes how day-to-day interactions and exchanges between partners are managed. The interface is comprised of exchanges of information, meetings, joins task forces, sharing of progress report and the like.

Management can use each of these design features to facilitate cooperation and to prevent or minimize conflicts.

Alliance Strategy

Many companies have engaged in strategic alliances without "alliance strategies". An alliance lacking strategy is a failure. A rational alliance strategy has three facets: a business strategy to outline the design and logic of alliances; a dynamic view to direct the management of each alliance; a portfolio approach to allow coordination among alliances. Yet, there might be the case where some of the most vital obstacles to alliance success lie in the individual partners, not in the co-operation itself (Casseres, 2000).

According to Gonzalez (2001), in today's networked economy, strategic alliances are the best way for a company to compete and succeed in spite of the industry or type of business. Building a strategic alliance and applying the right strategies to make it work are not easy. Alliances need to be reviewed regularly to determine if they are achieving their objectives. The goal is to make a decision as to whether the alliance should be terminated as the exit strategy or whether it still has life and new opportunities. A good relationship should be maintained appropriately as this can lead to opportunities to

continue to work together. It is much easier to manage multiple or reconfigured relationships with an existing and known partner than it is to manage multiple relationships with different partners. The majority of entrepreneurs invest great efforts in how to initiate, build, and maintain a successful relationship. Most businesses struggle with constructing effective strategic alliances because the partnerships tend to be very complex undertakings. When two or more companies seek to form alliances, the people within the organizations should share a bond of trust and mutual respect. When the people who are considering a partnership are different, building trust becomes a more challenging and delicate issue.

Kaplan and Hurd (2002) argue that strong and efficient alliances usually require the partners to adhere to three key principles: “(1) Define the purpose of the partnership; (2) establish a formal alliance management process and (3) nurture the evolution of the alliance actively and deliberately.”

Wallace (2004) supports that the requirements to bring a successful team together are that each potential alliance member is clear on the mission, goals and objectives. After the mission is established, the next step is to identify the target customers and which products and services the customer will be offered. This is because the partner may have a different set of customers and different ideas about what the products or services should be, and this can be an elaborate decision-making process. Setting boundaries for the relationship is another essential point. This includes determining ahead what the process will be for resolving the conflicts that inevitably arise in any partnership. Problems can be ironed out quickly with less possibility of causing any animosity between the two sides by having this particular discussion. Independence at a certain

level has to be maintained from the partner so the company can continue to grow and prosper beyond the alliance, unless the company expects to integrate or acquire the partner's company. The business environment is constantly changing and consolidating, so adjustment to that dynamic requires that businesses adapt quickly and efficiently to at least maintain their positions in the marketplace. A continuous examination of the relationships in partnerships is required to make sure that everything is well.

The Strategic Alliance Model

Booz-Allen & Hamilton (2000) define and propose several types of strategic alliance models. They recommend that in the next generation, successful companies will be those who exploit the full potential of the alliance models by taking full advantage of the alliance situation. Also, companies need to adapt their organizational structures to most suitably fit their strategic needs. The new business alliance models will be the growth engines of the future, and there is an enormous value in being an early adopter. These models must represent a single business model and it must cross corporate borders. While the basic principles hold, their applications will vary. The focus is on alliance knowledge creation and distribution, the people strategy and creating consistency throughout the entity.

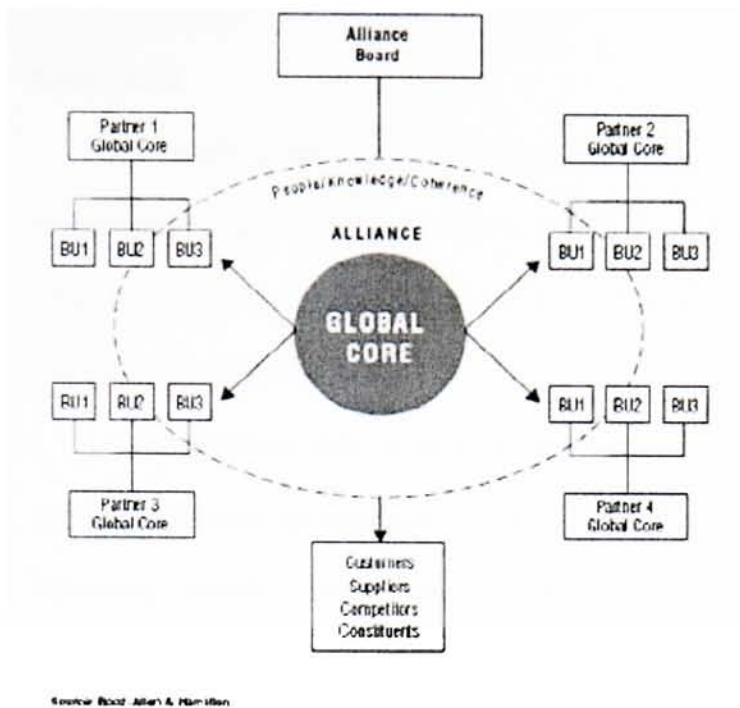


Figure 3. New business model for alliances
Source: Booz-Allen & Hamilton

Figure 3 above is shown as the new model of the future. Booz- Allen & Hamilton comment that in the next few years, the early adopters who can optimize the new alliance model will gain a competitive advantage and stay ahead of the competitors. There will be more companies seeking alliances as a growth vehicle. The differentiator will move from being able to form an alliance to being able to manage one. However, the competition is evolving and standards have yet to be set.

Conclusion

Strategic alliances have been around in the business world for decades. Different organizations apply strategic alliances to their own purposes differently. Definition and types have been interpreted ambiguously and diversely among experts and authors in related areas in the literature.

Nevertheless, their presence is becoming increasingly important to the firms across the industry as organizations start to become aware of the concept. Alliances are becoming a crucial function and part of business life. A strategic alliance gives a major benefit that allows all companies involved to compete for an opportunity that neither company alone could realize. Entrepreneurs who recognize these opportunities can identify potential partners to help them assemble the best team possible before the competitors and go after the newly emergent market opportunity. Thriving alliances require constant attention and a formal process of management. Strategic alliances have been used in the printing industry but hardly any studies focused on this area. As the nature of the printing industry involves various parties, the printing industry will gain great benefits by forming strategic alliances if carried out properly. Yet, so far no one knows exact answers of how these alliance strategies will develop and change the printing industry. One thing we can expect is they are going to become ubiquitous.

Chapter 3

Research Questions

Not only do internal relationships bring success to a company; external relationships become even more important in a competitive environment. Well-established and maintained relationships among organizations are a key to accomplishment.

To overcome the downward trend in the printing industry in the past few years, numerous companies realize that they do not want to be just vendors or print shops. As a result, companies seek business strategies that will allow them to offer more products or services to customers. Strategic alliances become solutions to survival. Small firms want to survive in such an intense competitive arena, and big firms want to expand their operations.

As the printing industry has been evolved, the author believes that alliances have shaped the industry a great deal and will impact upon the structure of companies in the future. The author investigated the current practice of alliances among companies which align both horizontally and vertically in the printing industry, or even into other industries. This research observed the alliance as a form of intra-organization relationship, and the author desired to describe the organizations that are entering into these alliances and what role they are taking. The research questions include: 1) what are the types of alliances

that exist in the printing industry? 2) what kinds of companies are involved? 3) what are the purposes of each company's partnering with each other? and 4) What does a strong strategic partnership look like in actuality? To answer this question the author will include a case study of a strong partnership.

Chapter 4

Methodology

Overview

This study uses qualitative techniques to describe or interpret the current practice of strategic alliances. The study is divided into two parts: summary of strategic alliances that have developed in last two years, followed by an in-depth case study. For the first part, established alliances in the printing industry within the time frame of the last two years were investigated. Then the author described who the major players are, their roles in the industry, and the nature of the relationships among partners in the printing industry. To enhance theoretical understanding of strategic alliances, a case study of an existing partnership will be included in this thesis.

Data Collection

The data were collected from companies in the printing industry that have announced and applied strategic alliances in the years of 2004 and 2005. Data sources are press releases, search engines, Web sites, scholarly journal, articles, and company Web sites. ABI Inform and Whattheythink.com are the major databases where the author used keywords to search for the information. The author only focused on the alliance between companies in the United States with others, so the alliances among other countries are excluded. The Selectory Business Database, a source of company profiles updated

monthly, was used mainly to find company profiles in terms of size, annual revenues and NAICS code.

Data Coding

A coding scheme (Appendix B) was used to organize and compile the data. This study is based on the alliances framework classified by Pekar and Margulis (2003): outsourcing, contract, joint ventures, equity, and merger and acquisition. As a result, the keywords used to search the data include outsourcing, contract, joint ventures, equity, and merger and acquisition. Other related keywords were also used such as strategic alliances, alliances, partnering, and partnerships. Types of alliances found were coded determined by specific keywords mentioned in the articles.

For the purposes of alliances, the author focused on the objectives mentioned in the sources. The purposes why companies enter into alliances were found such as technology agreement, research and development, growth strategy, global reach, marketing and promotion, distribution, cost reduction, and product portfolio. Purposes of alliances were coded based on the exact keywords mentioned in the articles. In some cases where the exact keywords were not found, they were coded based on their context. For example, the situation where two companies are working on developing a new product, the author coded it as a research and development purpose, even though the keywords “research and development” was not found in the source.

Structured interviews for a case study were conducted with the president of ColorCentric Corporation, a digital printing company in Rochester, NY. This case study observed the relationship built around their strategic partnerships. ColorCentric Corporation and one of its partners, Lulu.com, were investigated. ColorCentric

Corporation was chosen because their strategy and foundation are based on strategic partnerships. The background of the company is detailed in Appendix A. A set of questions was prepared (Appendix C) which mainly contains questions in the area of company profile, partners, and use of strategic alliances. The sources of the case study are the articles, the interview, and a roundtable event addressed by experts from ColorCentric, Lulu.com and Xerox, and one seminar which related to the topic being studied.

Data Analysis

The information was analyzed using the coding scheme and statistical software. From the coding scheme, the author was able to notice patterns before transferring the essential data into a Microsoft Excel spreadsheet. The data collected were analyzed using simple statistical techniques. These data provided the whole picture of the current practice of alliances in the printing industry. Specific results were drawn based on the research questions, along with other significant results. The author also applied extensive knowledge to formulate charts and a map of the model based on the data to draw out the conclusion.

All of the information gathered from the interviews, the roundtable, and seminars was transcribed, analyzed, and summarized into major sections. This case study provided solid insight into the business model and how companies carried out their partnerships.

Limitations

The data consist of only two years of established alliances because the objective is to understand the most current situation. There may be companies who established alliances without reporting or doing press releases. It is inevitable that there will be some

missing data, like revenues or the employee count, because those are not disclosed for some companies. Also, it is difficult to track back the previous information for some companies who were acquired by other companies. The record did not exist as it has already been updated and was added into the companies who bought them.

Chapter 5

Results

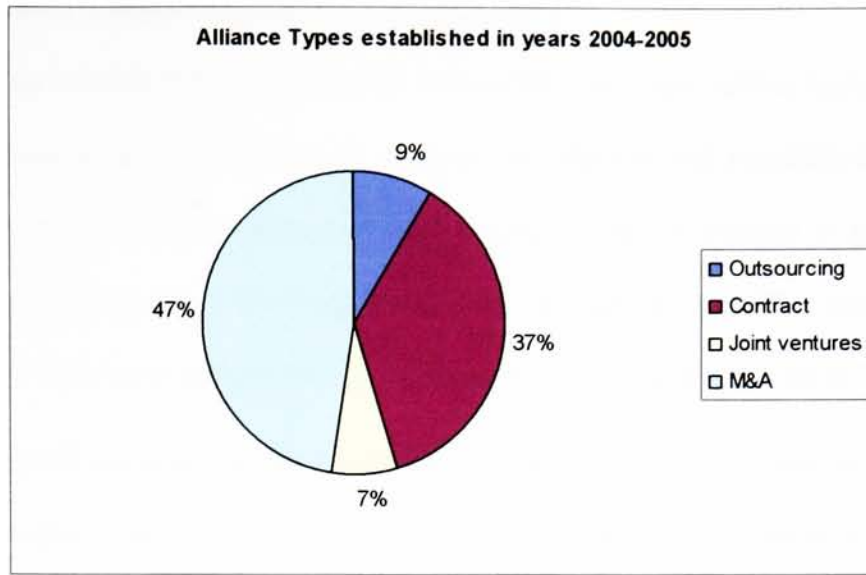
This chapter discusses the company alliances established in the years 2004 and 2005. A summary of interviews from the case study is also included.

There appears to be numerous companies that entered into alliances within only a few years. The author found 116 alliances established by more than 200 companies. These companies varied in size and annual revenue, ranging from less than one million dollars to more than 70 billion dollars.

According to Pekar and Margulis (2003), alliances come in a variety of forms, reflecting the full range of inter-corporate transaction types and the degree of integration between parties. They include outsourcing, contractual agreements, joint venture, equity stake (<50%), partial acquisition (>50%), and merger and acquisition. The first four—outsourcing, contractual agreements, joint venture, and equity stake—are considered strategic alliances, while many firms eventually end up in integration through acquisition.

Alliance Types

There were four types of alliances found in the study.



Alliance Types	Outsourcing	Contractual Agreements	Joint Ventures	M&A	Total
Number	10	42	8	56	116

Figure 4. Alliance types in the printing industry

Figure 4 shows the alliance types observed in the study. Outsourcing, in which an outside firm is contracted to handle company functions, constituted 9% of the alliances observed. Joint ventures, which are agreements of joining together two or more parties for the purpose of executing a project, constituted 7% of observed alliances. Contractual agreements, where two or more companies work together as an exclusive partnership constituted 37% of observed alliances. The most common alliance type observed was merger and acquisition, where a firm completely takes over another company; this constituted 48% of observed alliances. However, equity and partial acquisition rarely exist in the printing industry because, over a brief period of time, companies usually acquire all assets of the other party. There were six mergers found, most of them small print service providers who combined other old company names. For example, after merging, Tanagraphics Inc. and Seybert Nicholas adopted a new name TanaSeybert.

What Kinds of Companies Entered into Alliances?

In the printing industry, the supply chain embraces major parties, including manufacturers, print service providers, services, publishers as well as parties outside of the printing industry. Figure 5 shows the percentage of alliances grouped by print industry supply chain. Print service providers had the most alliances 37%. Manufacturers who supply material or equipment to print service providers accounted for 22%.

Various services including professional, scientific, technical, administrative, and support services comprised 15% of alliances. Publishers enter into alliances for 11% and non-printing-related companies accounted for 6% of alliances.

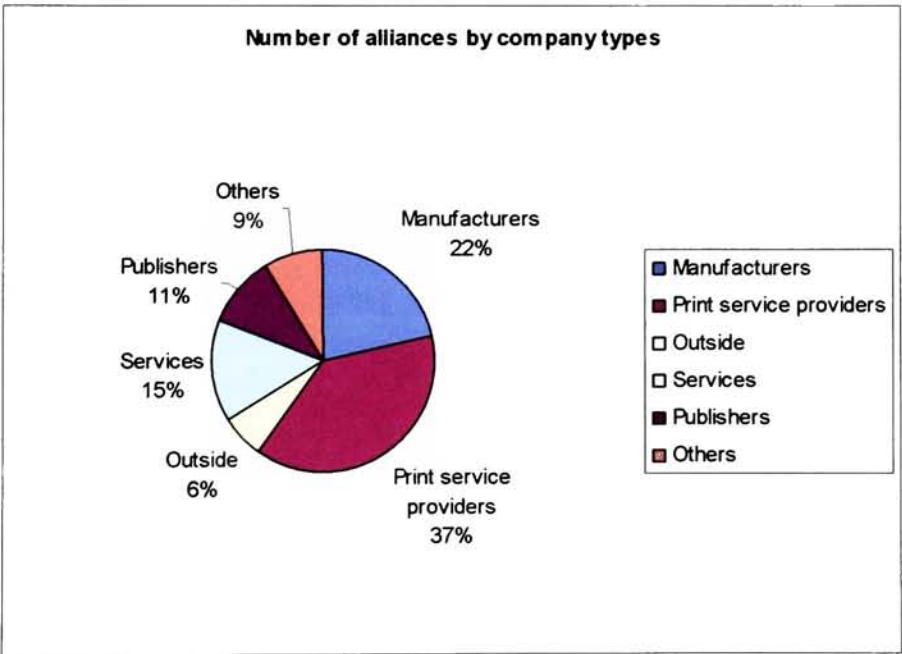


Figure 5. Alliances by company types

To investigate in detail the types of companies, they were classified using the North American Industry Classification System (NAICS), year 2002. There were a total

of 24 different NAICS classifications (Table 1); most companies were in printing and related support activities (code 323).

2002 NAICS	Corresponding Index Entries	Total Number	OS		Contract		JV		M&A	
323	Printing and Related Support Activities	92	5		12	7	2	2	33	31
541	Professional, Scientific, and Technical Services	31	1	1	4	11			6	8
511	Publishing Industries (except Internet)	25		1	12	4			5	3
333	Machinery Manufacturing	17	1		2	3	2		5	4
423	Electronics and Appliance Stores	15		2	4	3	1		2	
334	Computer and Electronic Product Manufacturing	13	1		3	5	1	1	2	
322	Paper Manufacturing	10					3	2	2	2
325	Chemical Manufacturing	7			4	1			1	1
454	Non-store Retailers	4				1		1		2
561	Administrative and Support Services	4		1		2				1
326	Plastics and Rubber Products Manufacturing	1							1	
339	Miscellaneous Manufacturing	1								1
424	Merchant Wholesalers, Non-durable Goods	1				1				
Outside of the printing industry										
315	Apparel Manufacturing	1								1
336	Transportation Equipment Manufacturing	1								
492	Couriers	1								1
517	Telecommunications	1		1						
518	Internet Service Providers, Web Search Portals, and Data Processing Services	2						1		1
522	Credit Intermediation and Related Activities	1				1				
524	Insurance Carriers and Related Activities	1		1						
551	Management of Companies and Enterprises	1		1						
611	Educational Services	1		1						
813	Religious, Grantmaking, Civic, Professional, and Similar Organizations	2			1	1				
927	Space Research and Technology	2				2				

Table 1. Company classifications by NAICS

Table 1 lists the number of companies within an NAICS classification in each type of alliance based. Left column represents the companies who were the actor and right column represents the companies acted upon. Actors here are defined as either the company who initiates the agreement or who is bigger. The outsourcing actor is the

company who outsources services. The merger and acquisitions actor is the company who acquires another company. However, the contractual agreement or joint venture actor is the company that is larger and has more revenues. Table 1 also lists the number of companies that were outside of the printing industry and had a relationship with companies within the printing industry.

Generally, there were only two parties in an alliance. The exceptions were Xerox International partners, FujiXerox, and Dell, which aligned to expand imaging and printing marketplace. Consolidated Graphics acquired an affiliated group of commercial printing companies operating as Nies/Artcraft Printing, Valcour Printing, and Impression Label in St. Louis, Missouri.

Outsourcing

The 10 outsourcing alliances observed are shown in Table 2. Examples of outsourcing services observed are document managed services, printing services, and IT services.

ServiceBuyer	NAICS code	Employees	Sales (\$mil)	Outsourcing Provider	NAICS code	Employees	Sales (\$mil)
Transcontinental Media	511	53	4.1	New York Times Co.	323	12,300	3,303.64
MAGNET	561	N/A	5.13	FedEx-Kinko's	323	20,000	2,000.00
Bowne Global Solutions LLC	541	4,900	899.01	BAeHAL Software Ltd.	334	N/A	N/A
Northwestern University	611	5,954	1,115.61	FedEx-Kinko's	323	20,000	2,000.00
R. R. Donnelley & Sons	323	43,000	8,000.00	IntraLinks	541	214	37.22
CIGNA	524	28,600	18,176.00	R. R. Donnelley & Sons	323	43,000	8,000.00
MCI Inc.	517	40000	20,690.00	Danka Holding Co.	423	10,870	786.79
Hewlett-Packard Co.	423	151,000	79,905.00	Heidelberg	423	24,649	3,360.27
IBM Global Services	423	319,876	96,293.00	Danka Holding Co.	423	10,870	786.79
Barclays Bank	551	N/A	N/A	Xerox Corporation	333	58,100	15,722.00

Table 2. Companies with outsourcing

Almost fifty percent of outsourcing alliances were initiated by print service providers, while forty percent were relationships initiated outside of the printing industry. There are different types of companies entering into outsourcing. The first column represents the companies who are the service buyer and the fifth column represents the companies who provide outsourcing service.

Contractual Agreements

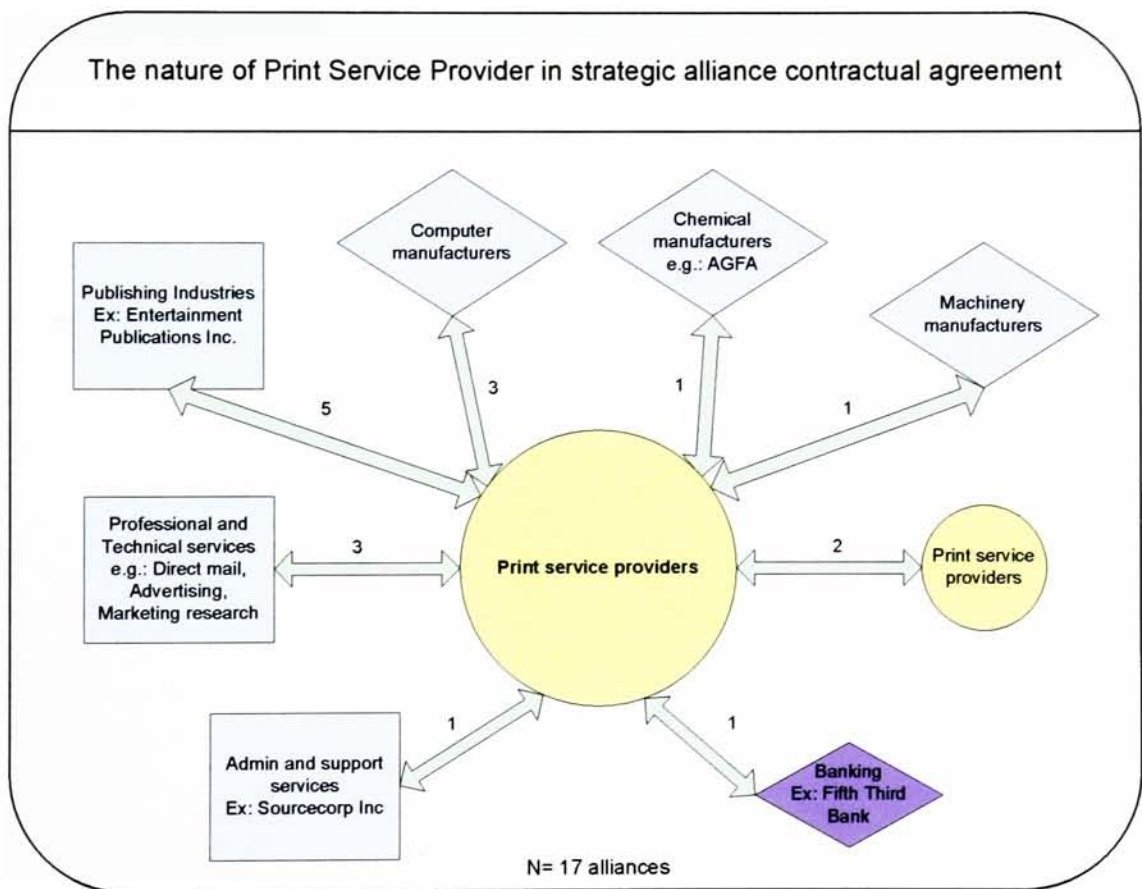


Figure 6. The nature of print service providers in contractual agreements

The types of firms entering into contractual agreements were diverse. Almost all NAICS classifications were represented. Print service providers played a big role, being

involved in almost 50% of all contractual agreements. Out of 42 contractual agreements, the number of print service providers that formed alliances with others was seventeen contractual agreements.

Figure 6 illustrates the contractual relationships print service providers had with others parties. The number shown next to each link is the number of contractual relationships observed. Print service providers tended to ally themselves with a variety of company types: the most common was with companies in the publishing industry (five contractual relationships).

Company A	NAICS code	Employees	Sales (\$mil)	Company B	NAICS code	Employees	Sales (\$mil)
Objectif Lune	511	18	2.00	Codehost	541	N/A	1.10
Global Graphics Software Inc.	541	N/A	2.50	Qualitylogic	541	120	10.00
Xplor International	813	10	3.53	Baker Communications	541	532	39.40
Printable Technologies Inc.	541	40	3.90	AccuData America	541	138	5.31
Xerox International Partners	541	75	5.40	Fuji Xerox Co. Ltd., Dell Inc.	334	55,200	N/A
Jetrion LLC	325	4,500	5.50	Sira Technologies	927	N/A	N/A
Nipson America	334	270	39.29	Pitman Co.	424	500	545.21
International Technoprint Inc.	511	136	92.97	Cordeo	541	N/A	N/A
Oce	511	11,000	120.00	MacDermid ColorSpan	334	2,362	660.79
Creo	423	N/A	126.80	Sichuan Juguang Printing Apparatus Co. Ltd.	325	300	N/A
Lasertel	334	1,089	129.85	SELEX Sensors and Airborne Systems	927	N/A	N/A
Jetrion LLC	325	4,500	1,476.64	Advanced Electron Beams, Inc.	335	N/A	1.30
Adobe Systems Incorporated	511	3142	1,666.58	AIGA	813	N/A	5.65
AGFA	325	4391	2,349.95	B&P Lightbrigade Group	423	N/A	N/A
McGraw-Hill Construction	511	17264	5,250.54	ReproMAX	561	N/A	N/A
Graphics Microsystems	334	25520	5,488.11	Integrated Color Solutions	511	N/A	N/A
Ricoh Corporation	423	72992	8,613.28	ECopy	541	N/A	12.20
Ricoh Corporation	423	72992	8,613.28	Levi, Ray&Shoup	541	503	123.21
Kodak Polychrome Graphics LLC	423	54800	13,517.00	Artwork Systems Group	541	N/A	45.89
Xerox Corporation	333	58100	15,722.00	EDS	541	N/A	N/A
Quark Inc.	511	470	N/A	Enfocus Software	423	N/A	1.40
PerfectProof	511	N/A	N/A	X-Rite's	333	643	126.24
GMG	511	N/A	N/A	Chromaticity	541	N/A	1.50
CGS Publishing Technologies	511	N/A	N/A	KBA	333	7266	1,848.33
CGS Publishing Technologies	511	N/A	N/A	Build East Graphics	423	N/A	N/A

Table 3. Company with contractual agreements

Table 3 lists the contractual agreements observed which did not include print service providers. There were 25 contractual agreements, with most companies in the publishing industry or professional services.

Joint Ventures

A joint venture is an agreement for executing a particular business enterprise, with partners sharing the profits and losses of the venture. The venture is for one specific project, rather than for a long-term business relationship. Table 4 shows the results of the eight joint ventures found in the study. Fifty percent of them were initiated by print service providers and 80% of the ventures were established overseas.

Company A	NAICS code	Employees	Sales (\$mil)	Company B	NAICS code	Employees	Sales (\$mil)
Starr Toof Printing	323	125	10.9	Flexeprint, Ltd.	454	N/A	N/A
Sonopress LLC	334	75,537	90.7	Coral Graphic Services	323	75,537	21.70
Cadmus Communications Corporation	323	3,000	436.44	Datamatics Technologies Limited	518	N/A	13.00
Pitney Bowes Inc.	333	27,152	4,957.44	Semco	334	N/A	N/A
Sappi Fine Paper North America	322	N/A	5,482.66	Jiangxi Chenming	322	N/A	N/A
Xerox Corporation	333	58,100	15,722.00	Pantone	323	140	14.800
Stora Enso	322	43,779	16,100.90	Xeikon	423	400	7.400
Stora Enso	322	43,779	16,100.90	Shandong Huatai Paper	322	N/A	N/A

Table 4. Companies with joint ventures

Mergers and Acquisitions

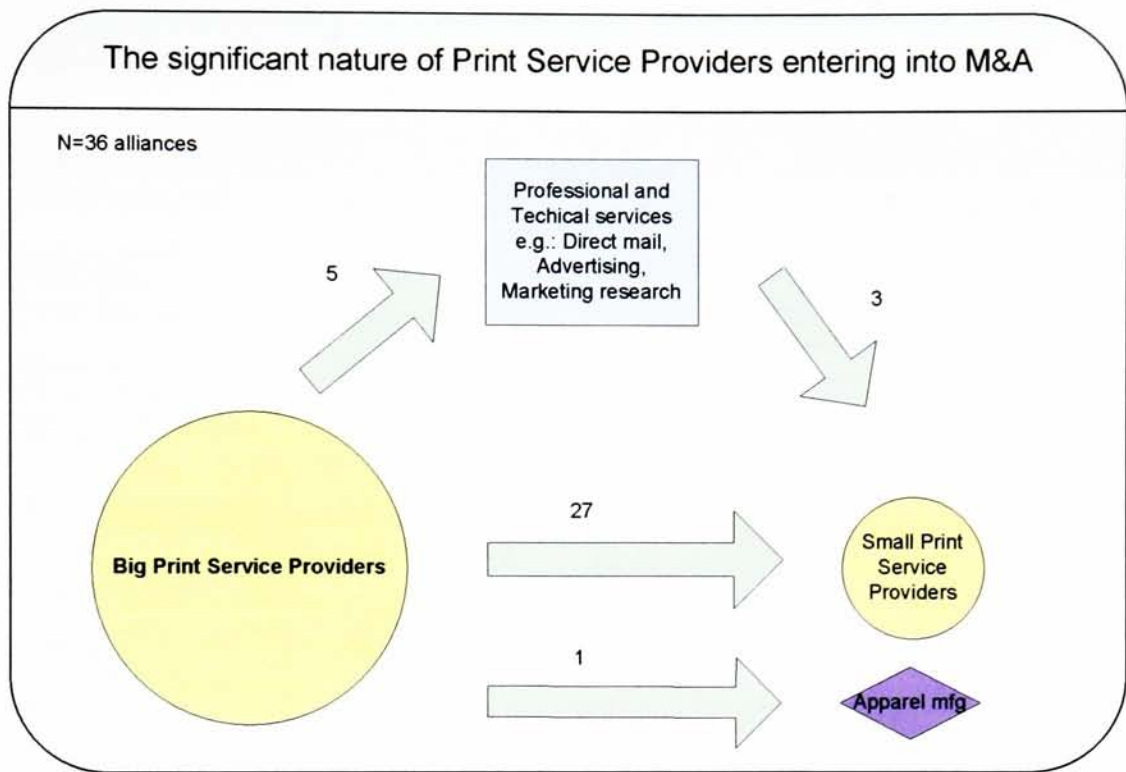


Figure 7. The nature of print service providers in M&A

Figure 7 shows the relationships of print service providers involved in M&A. Most companies studied who entered in M&A were print service providers. In 27 acquisitions out of a total of 56, print service providers acquired a smaller print service provider. Administrative and support service companies acquired smaller print service providers as well. There was one case where a print service provider acquired a company outside of the printing industry: Ennis acquired Alstyle Apparel & ActiveWear Manufacturing Co.

Table 5 shows the M&A that did not involve print service providers; there were 20 acquisitions. Overall, out of 56 M&As, there were 32 acquisitions in which companies acquired the same type of company, and 27 of these were print service providers.

The Buyer	NAICS code	Employees	Sales (\$mil)	Acquired Companies	NAICS code	Employees	Sales (\$mil)
Allegra Network LLC	541	65	12.00	Signs Now Corporation	339	N/A	3.3
Scanvec Amiable	541	N/A	17.00	Colorbus European Operations	511	N/A	N/A
Visual Edge Technology Inc.	334	275	33.90	Copeco Inc.,	423	70	N/A
Docucorp	511	400	79.17	Newbridge Information Services	518	N/A	3.5
Pitney Bowes Management Services (PBMS)	541	N/A	137.00	Compulit, Inc.	511	300	30.10
Multi-Color Corporation	322	826	139.46	NorthStar Print Group, Inc.	322	275	60.00
Day International Group Inc	326	1470	362.70	Network Distribution International	333	N/A	28.80
Electronics For Imaging Inc	334	1,424	394.60	VUTEK	333	N/A	N/A
Flint ink	325	4500	1,476.64	XSYS	325	3600	1,070.00
Adobe Systems Incorporated	511	3142	1,666.58	Macromedia, Inc	511	1445	436.17
Pitney Bowes Inc	333	27152	4,957.44	Kilburn Office Automation Ltd	333	N/A	N/A
Pitney Bowes Inc	333	27152	4,957.44	Imagitas	541	N/A	7.10
Pitney Bowes Inc	333	27152	4,957.44	International Mail Express	541	170	54.00
Kodak	333	54800	13,517.00	Creo	423	25000	636.00
Kodak	333	54800	13,517.00	NexPress Solutions Inc	333	N/A	142.00
International Paper	322	79585	25,548.00	Compagnie Marocaine des Cartons et des Papiers (CMCP)	322	N/A	N/A
FedEx Corp	492	237350	29,363.00	Kinko	561	N/A	200.00
BookSurge LLC,	511	N/A	N/A	Amazon.com	454	N/A	N/A
Quark Inc	511	470	N/A	A Lowly Apprentice Production Inc	541	N/A	1.5
Zinio Systems, Inc	511	N/A	N/A	Blue Dolphin Group	454	89	4.5

Table 5. Companies with merger and acquisition

Companies with the Most Alliances

Some companies established more than one alliance in the last two years. Figure 8 shows that R. R. Donnelley & Sons formed the most alliances. Interestingly, the four companies with the most alliances were also in the top-ten for revenue for commercial printing businesses in 2005. The data indicates that they mainly entered into M&As to acquire the same type of companies to expand their market share.

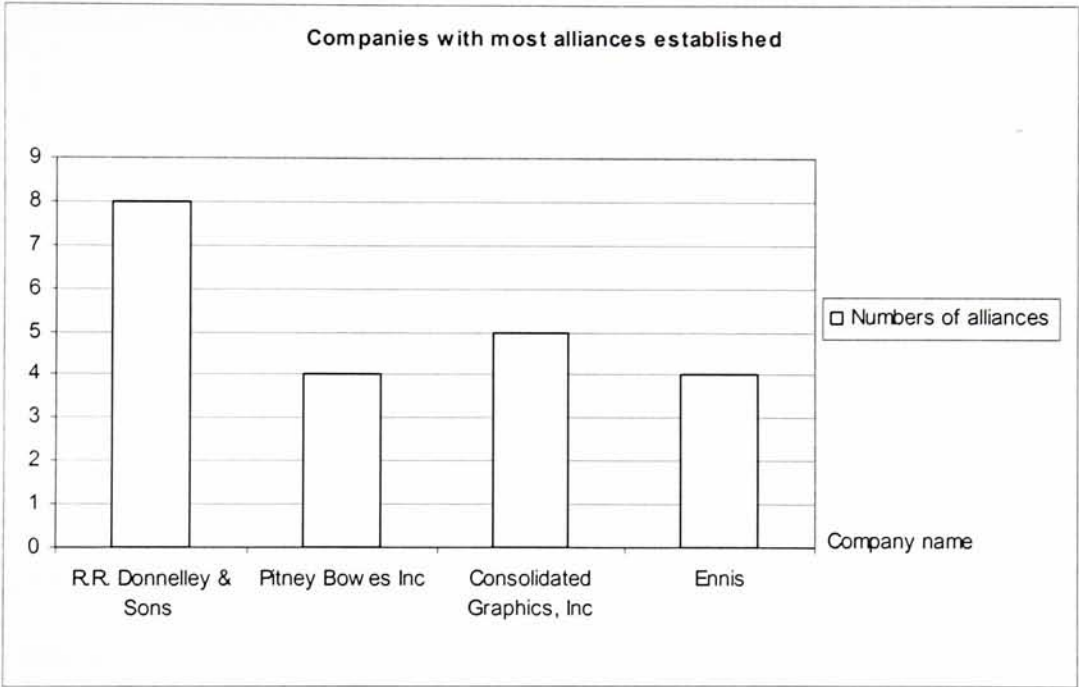


Figure 8. Companies with the most alliances

These four companies focused on a growth strategy through acquisitions. Growth in size and revenue are what they wished to accomplish by acquiring multiple small companies within a few years. Not only did R. R. Donnelley & Sons focus on its growth, it also wanted to strengthen its position in Europe and Asia. It also engaged in some contractual agreements with small print service providers. Ennis was ranked first in revenue growth

in 2005 because of its acquisitions throughout the year. Consolidated Graphic also believes in acquisition: there are nearly 70 companies in the Consolidated Graphic family, which will boost its revenues to \$1 billion next year. Pitney Bowes Inc. mainly acquired mail businesses to support its growth strategy.

Partner’s Location

Table 5 shows where alliance partners were located.

Location	Number
US, Canada	91
Asia	8
Europe	14
Latin America	3
Total	116

Table 6. Partner’s location

Most alliances were formed within North American. Fourteen alliances originated between North American and Europe—mainly the United Kingdom. Alliances between North American and Asia were found in India, China, and Malaysia.

Reasons Firms Entered into Alliances

There are various reasons companies enter into alliances:

- Research and development: partners work on a project or a program to improve or create new products
- Marketing and promotion: partners want to promote market or sell products together
- Technology: partners exchange or transfer their technology to another partner
- Cost reduction: partners wish to take advantage of cost synergies or cost effective strategy

- Product portfolio: partners want to add more products or services or combine services in a specific product segment to offer a wider range of services or add value for customers
- Global reach: partners want to penetrate the international markets of another partner location
- Distribution: a company assigns exclusive rights to distribute its products
- Growth: partner wishes to increase in size or revenues
- Market expansion: a company wishes to increase its market presence geographically
- Manufacturing: to produce products for another partner

Outsourcing

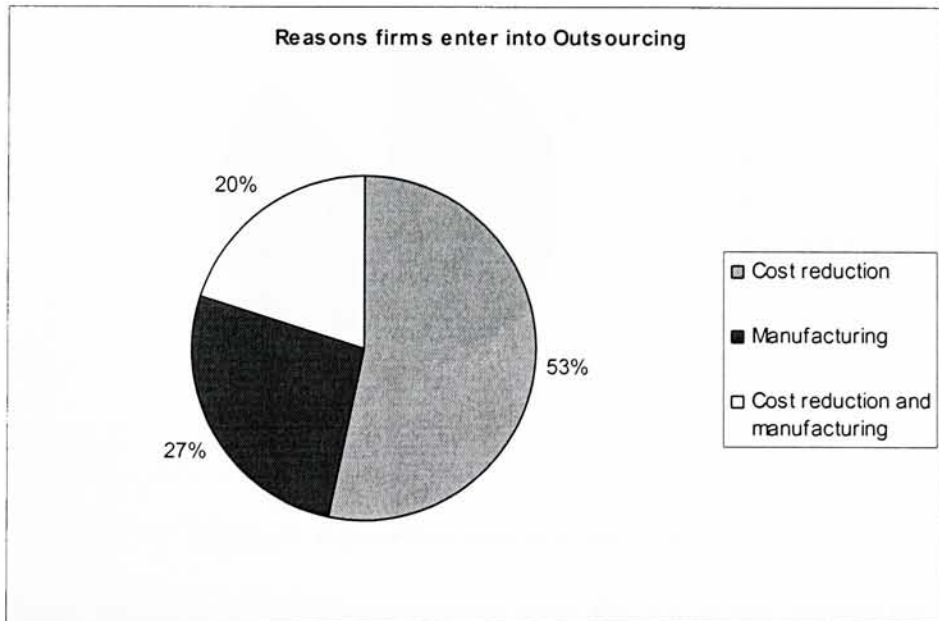


Figure 9. Reasons firms enter into outsourcing

Figure 9 shows that there are two main reasons companies decided to outsource: cost reduction and manufacturing. Cost reduction was the reason given by 53% of outsourcing firms. For example, Danka Holding Co. outsources its IT department to IBM Global Services. Manufacturing is the second major reason firms give for outsourcing. For example, for its Ontario-Buffalo-Rochester market, New York Times Co. outsources to Transcontinental Media to produce 15,000–20,000 copies of its magazines a day from Monday to Saturday, and 30,000–35,000 copies on Sundays. Both manufacturing and cost reduction was given as a reason for outsourcing by 20% of companies.

Joint Ventures

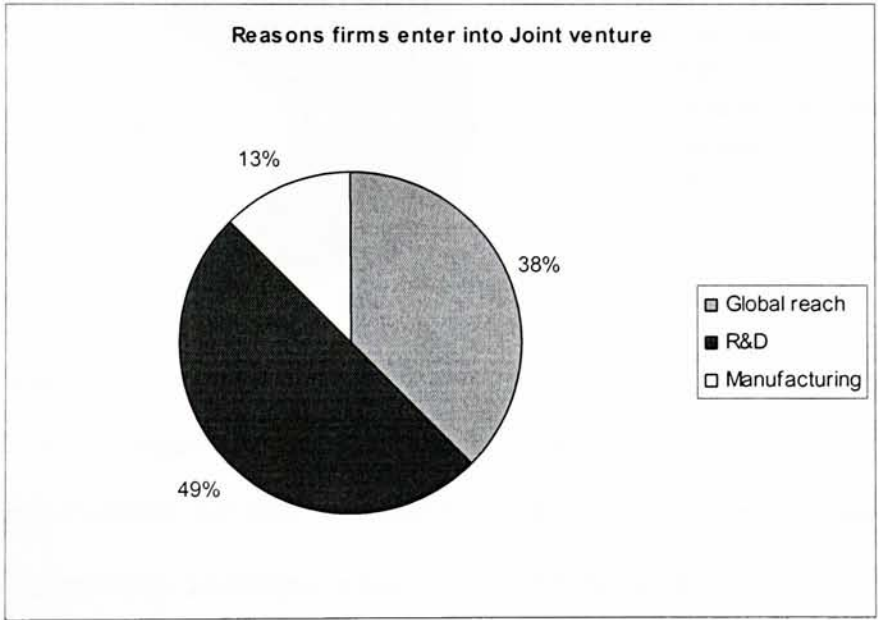


Figure 10. Reasons firms enter into joint ventures

Figure 10 shows the three main reasons given for companies entering into joint ventures were to penetrate global markets, research and development, and manufacturing. Research and development was the reason for 49% of joint ventures. For example, Stora Enso initiated a joint venture with Shangdong Huatai Paper Company in China to conduct

a feasibility study to determine if the Chinese market is suitable to set up a plant. Global penetration was the second reason why companies entered into joint ventures (38%). An example is Cadmus Communications, which created a joint venture with Datamatics Technologies to form a new venture in India called KnowledgeWorks Global Limited. Manufacturing was the reason given for the remaining 13% of joint ventures.

Contractual Agreement

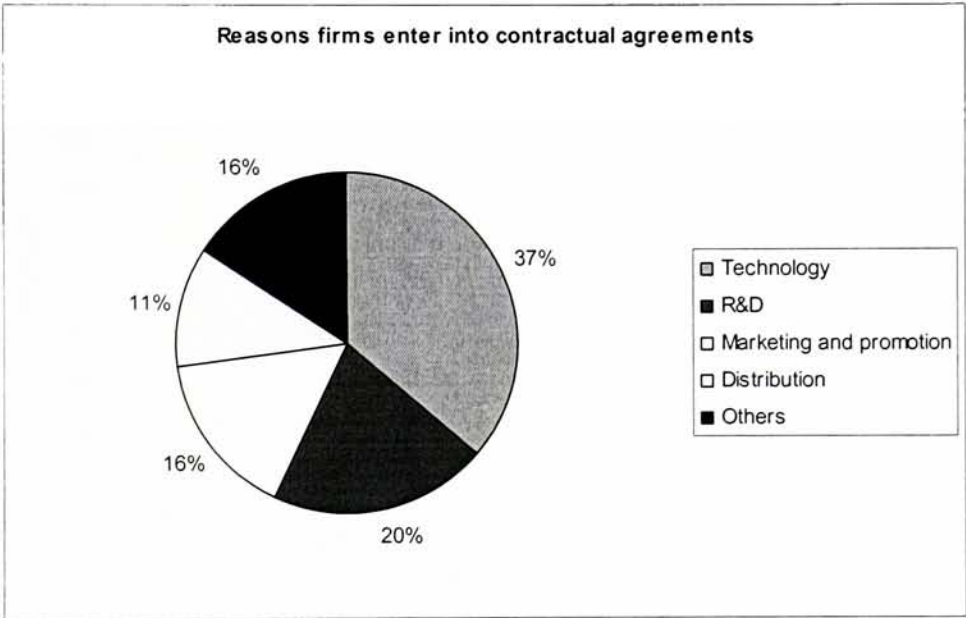


Figure 11. Reasons firms enter into contractual agreements

Figure 11 shows that there are numerous reasons why companies engaged in contractual agreements. The largest reason was for getting access to advanced technology without any capital investment (37%). Technology is especially important for software companies. Research and development was the second most common reason for contractual agreements (20%). For example, to develop a range of products for the small commercial print market, Presstek Inc. and EFI entered into a multi-year contractual agreement. Marketing and promotion was the reason for 16% of contractual agreements.

For example, Graphics Microsystems and Integrated Color Solutions partnered to promote the use of ICS, Remote Director monitor-based contract proofing system on web presses equipped with GMI press control systems. Distribution was the reason for the 16% remaining of contractual agreements.

Merger and Acquisition

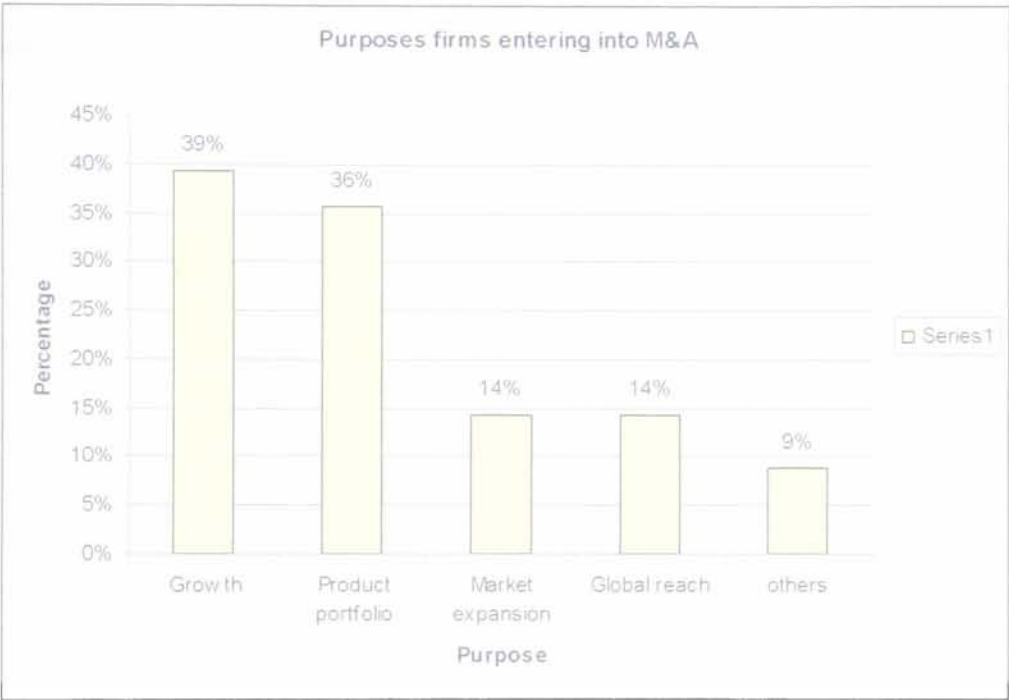


Figure 12. Main reasons firms enter into M&A

Figure 12 shows the reasons firms engaged in M&A. There were many cases where firms had multiple responses. Growth was the most common reason (39%). This means growth in size to become larger or the largest company in the area. The data indicate that bigger firms acquired smaller companies. The second most common reason for M&A was to add more products or services to the product portfolio (36%). While most companies want to add digital printing or other services to their offset printing, some companies want to offer value-added services. There are many cases where firms had both growth and

product portfolio reasons for acquiring another company. For example, Pitney Bowes Inc. had as its growth strategy to add mail stream segment by acquiring multiple mail companies. Market expansion and global reach were the third and fourth most common reasons for M&A, both constituting 14%. For example, Pacific Printing acquired Resolve Print & Mail to reach the Sacramento, California market. There were several companies that wished to expand their businesses overseas. For example, Schawk acquired Seven Worldwide and Winnetts to penetrate to the United Kingdom market.

Case Study

Overview

This section is a case study featuring the in-depth analysis of one strategic alliance. ColorCentric Corporation and Lulu.com were chosen for the study because their partnership represents a major breakthrough for the publishing and printing industry. The background is referenced in Appendix C. The main questions of the case study are: How does a strategic alliance work among partners? Why do they decide to enter into strategic partnerships?

ColorCentric Corporation and Lulu.com announced their strategic alliance in September 2004, to combine their services to streamline supply chain processing of book publishing. They believe in print-on-demand as the ability to produce small quantities of books as needed, yet also maintain a quality of a traditional printing. Print-on-demand publishing means that whenever a book is ordered, bought, or requested, a copy of the book is printed. The traditional print publisher publishes several thousand copies. These books are then sent to bookstores. The remainders are stored at a warehouse. They may be shipped as the orders come in, or join any remainder copies the bookstores couldn't sell. Setting up a book on a traditional printing press is a long, costly process and printing one copy of a book would cost thousands of dollars. Digital technologies, therefore, have brought changes. ColorCentric Corporation and Lulu.com have developed an integrated web-to-print service that allows the end-users to hold no inventory.

Business Profile

Lulu.com profile

Lulu.com is the web-based publishing marketplace established in 2002 by Bob Young, a co-founder of Red Hat, the open source software company. Young believes that using the Internet and the latest print-on-demand technology, Lulu.com, is revolutionizing the publishing industry in the same way that Red Hat and open source revolutionized the software industry. Lulu.com is an online business that allows users to publish, sell and buy the digital contents of books, music, comics, photographs, and movies. There is no set-up fee and no minimum order to publish and sell on Lulu.com. Users can also earn royalties for their own work, and Lulu.com makes a small percentage from each transaction.

ColorCentric Corporation profile

ColorCentric Corporation, a Xerox Premier Partner with headquarters in Rochester, New York, is a digital printing solutions provider. ColorCentric Corporation has established its business based on print-on-demand and strategic partnerships, with industry-leading companies as its clients. Using technology from partners like Xerox, ColorCentric Corporation's mission is to change the way the world views digital color printing by bringing customers closer to the manufacturing process and incorporating the most up-to-date technology to reduce cost, time to market, and workload for clients. ColorCentric Corporation makes Lulu.com's business possible by providing manufacturing and shipping, and acts as their printing hub. Files are transferred from

Lulu.com and ColorCentric Corporation delivers the finished products to end-users. By working together, ColorCentric Corporation gains access to a larger customer base and Lulu.com need not invest in printing equipment and factories.

Summary of Interview with John Lacagnina, President of ColorCentric Corporation

Background

ColorCentric Corporation was established in November 2002 by John Lacagnina, the company's president, who had a long-standing relationship with Xerox. He developed ColorCentric around Xerox's new Docutech iGEN3 printer, which was installed in February 2003. In the first year of operations, ColorCentric had to spend time developing software and processes and learning the Xerox iGEN3 operation. ColorCentric's business started gradually, working with Xerox to produce marketing literature as well as with communication companies such as Roberts General Communications. The business initially focused on walk-in customers, because ColorCentric was yet to have its full operations up and running.

The company is currently growing at a fast pace, and their cash flow has been positive after the first year of business. Two Xerox iGEN3s accounted for 50% of capacity, and within 18 months there will be a total of ten Xerox iGEN3s to add more capacity and print power. Moreover, the company is going to expand to larger facilities in order to accommodate the ten iGEN3 printers. This manufacturing cell will consist of the front end system and all the binding equipment and packing; the operator will be responsible for printing, binding, cutting, and attaching. When it leaves the cell, it's ready to be shipped.

Contractual agreement

ColorCentric Corporation has an exclusive contract with Lulu.com for a period of three years. However, the chance that they will renew the contract essentially depends on ColorCentric Corporation's performance during the term. The average time required to fully integrate a new partner is eight months, therefore Lulu.com will have to notify ColorCentric Corporation six months in advance if they want to terminate or renew the contract. On the other hand, if Lulu.com's business gets too big, ColorCentric Corporation will not be able to handle it.

They also have a performance agreement based on turnaround time, quality, and the physical measurement of product. The most difficult part is to guarantee turnaround time in production, and guarantee a minimum return, which must be less than half of a percent, with 99% customer satisfaction. It is unusual for customers to return their products, but it could be for several reasons such as shipping, file errors, error in the process, or a caption is lost. Basically, as they download, print and RIP, they still experience 1% of file nuances.

Partners

ColorCentric Corporation partners with companies such as Lulu.com, Qoop and Sharebook. The idea behind the successful partnership is that each company invests in what it knows best, and as long as there is trust it is the best strategic relationship.

ColorCentric Corporation's first major partner was LSI (Lightening Source, Inc.), which came about a year after the business was established. Then Lulu.com came next through a referral from Barb Pellow at Rochester Institute of Technology. The Lulu.com

partnership began when ColorCentric Corporation was in just a semi-automatic state with LSI. They came along and believed in the whole idea of a perfect partnership. Lulu.com wanted to be totally automated; they were looking for a printer that understood their model. To establish the process with ColorCentric Corporation, Lulu.com came to them and initiated a mutual strategic relationship.

Another partner of ColorCentric Corporation is Qoop, a front end like Lulu.com without a publishing space. Qoop approached ColorCentric Corporation five or six months ago, in much the same way as Lulu.com by simply contacting them via telephone, and then both founders visited the site. Qoop believed ColorCentric to be the only place able to work in the way they required. They have three different websites recently just turned on – Buzzend, Yahoo!, and their own print website – and cover every other spaces, like marketing literature, corporate material, and photo albums. Qoop and Yahoo! Photo have lots of different combinations of product departments, and their catalog is much larger than Lulu.com. Each partner gets the indirect benefit of every other partner in terms of knowledge.

Relationships from the supplier side, like Xerox, also play an important role. Xerox has its own people at the site every week to support ColorCentric. Thus, Xerox is considered to be a very important partner in exchanging information. As John Lacagnina explained, “My success is their success . . . partnership with Xerox is critical and they are necessary beneficial to me: that’s a real measure of partnership.”

Marketing strategies

ColorCentric does not compete with Lulu.com as they are the printing company, not an online community site. They can print directly and ship anywhere people want but they do not sell or market their products since they are in charge of the printing and distribution. There is a point in the life cycle of a book where it no longer makes sense to do offset, and that point is where ColorCentric takes the role, printing them for customers directly. They simply aim at incremental business, not to compete with the current offset market.

The strategy to draw customers is the website, where most people go because of the affinity concept. Customers may be passionate about various topics, such as pets, health, food, etc., and the concept is to link their supply chain to an affinity site used by people with a common interest. For example, PetSmart will give a hint of sales for the month, and also offer photo calendars or albums. ColorCentric can make this material become a marketing piece, offering coupons in the back of the album. Thus it becomes more than a photo album, with many extensions to the value. This creates a whole new market brand that wasn't available before.

There is a chance that big publishers like Barnes & Noble will be attracted and want to use this supply chain because they have lots of books on the shelf that never move. Since there is uncertainty involved in selling these books, the idea is that they can start by printing a small quantity to measure the market. If the sales are promising, publishers can get them printed by offset traditional printing later, once they are certain about the market.

The convenience in digital printing is exploited enormously. For example, putting a seminar book together and carrying copies to the seminar has always been a big task, with some companies like Kodak spending thousands of dollars on producing these books.

Today, with ColorCentric, it becomes really easy. The order is shipped, quickly and conveniently, to where the seminar will take place. They get access to the name list of attendees and can personalize copies at no cost by putting the name and the date of the presentation on the cover.

Customers of Lulu.com can upload the work online for free and may sell content for free or add royalties.

Printed content	Price per unit\$
Base price	4.53
Per page B/W	0.02
Per page color	0.15

Table 7. Price per printed content

To set a royalty, customers choose the desired royalty and Lulu.com adds a 25% author royalty as Lulu.com’s commission. For example:

	Price per unit \$
Royalty	1.00
Lulu.com commission	0.25
Total mark up	1.25
Total price	1.25+production

Table 8. Customer Royalty

ColorCentric Corporation charges Lulu.com accordingly, and Lulu.com will have a profit of 20%. If customer of Lulu.com order more quantities they will be charged less per unit.

Investment

ColorCentric Corporation invested around \$30,000–40,000 just for software development to start up a business with Qoop. With Lulu.com, it cost them an initial investment of around \$50,000-60,000 for software development.

Technology

This new business model is not based on the manual and micro management of inventory; their model has no inventory whatsoever. Therefore, ColorCentric did not use any contacts from Peoplesoft, Microsoft, or NCR, who provide solutions to inventory control and inventory management to ensure that the business can purchase, sell, and replenish stock to control costs and meet customer needs

ColorCentric Corporation uses a modified XML (Extensible Markup Language), file format created by taking a subset of PrintTalk. PrintTalk is a consortium of e-commerce and print management vendors seeking to provide an open XML standard to communicate specs, requests for quotes, quotes, orders, and other business information used in the graphic arts industry. PrintTalk is a community formed by print management systems and e-commerce companies to define a best practice common and open communications interface between their products. PrintTalk allows a lot of what ColorCentric Corporation needs, but it was overly complex. Therefore, ColorCentric Corporation took a simple approach: since it is not an infinite number of combinations of books, they can only reasonably have some standard sizes and standard formats and aspect ratios. They used a catalog approach by defining standard product types, sizes, color or black and white, and paper types.

Lulu.com and Sharebook came along and have an even more complicated XML. This depends on how sophisticated users are and how people put safeguard in handling. ColorCentric Corporation modifies their XML slightly, equipped with their experiences and knowledge in making documents. Limitation and tolerances, better control, and lean manufacturing were done. They have to add to their PDF generator and XML, yet they still have to modify some aspects because Lulu.com wanted to add options like cancel the order and change the address.

The order for type of book, certain sizes and one order gets matched together in a manufacturing cell. They go through the queue, on a first come first serve basis. The finished product is delivered to the customer within around 48 hours. The average number of pages per order for a large run is 500 pages, which is becoming common for authors and publishers. Larger runs usually jump the production schedule.

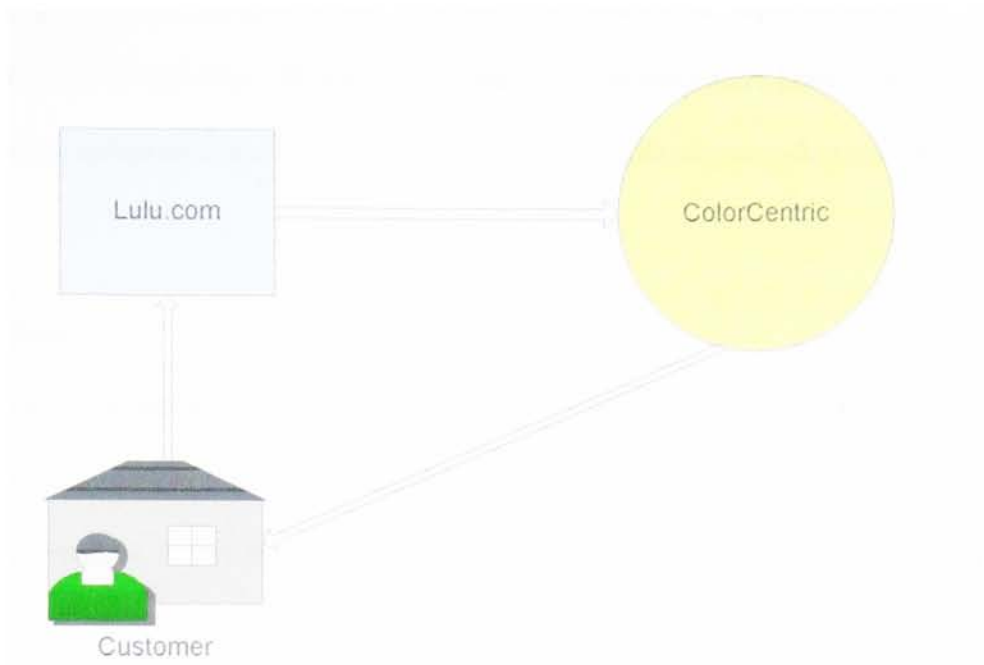


Figure 13. Relationship between ColorCentric Corp and Lulu.com

ColorCentric Corporation presents a new model of the partnership concept. Their entire business concept is based on strategic alliance. They took advantage of Xerox iGEN3 to build a thriving digital printing business. Back in the day when the option was limited to offset or traditional printing, time was always an issue. Orders came in for bulk quantities to get the lower rate. With this new model, jobs get produced faster and offer more convenience to customers facilitating the whole supply chain. Traditionally in the print supply chain, major players are suppliers, print service providers, distribution and end users. Through their partnerships between ColorCentric Corporation and Lulu.com (Figure 13), it users are able to automatically upload their file through a web interface to Lulu.com. Then the order gets through the manufacturing cell with ColorCentric Corporation and the finished product is delivered to users within 3-6 days. The

partnership provides tremendous benefits between partners where either one could not achieve the goals alone. Henry Hutton, from Lulu.com, presented "OpenBook@RIT" on September 22, 2005 said that 100,000 books in the last 3 months have been sold, and currently there are an estimated 200 per day orders and 80,000 registered users with Lulu.com.

Type of company

ColorCentric Corporation is classified by NAICS into 323 category as a printing and related support activities company. Lulu.com is classified into 511 category as a publishing company. Xerox, as a supplier is classified into 333 category as a machinery equipment company.

Type of strategic alliance

ColorCentric Corporation and its partners depend on each other to make this business model feasible. The relationship among them is well designed and favorably connected.

Their alliance is classified as a exclusive contractual relationship where it lies upon a strategic agreement.

Purpose of alliance

The purpose of entering into this is mainly to acquire the technology resources without investing in capital expenditures. ColorCentric Corporation gains access to customers without developing a front-end system. At the same time Lulu did not have to invest in printing machines and distribution.

Benefits

The benefits for each partner are to exchange or transfer technology, resources, and knowledge by working together. Not only do ColorCentric Corporation and its partners benefit but it also benefits anybody who wants to participate in this simple model to publish or print the content not only restricted to books but calendar, blog, photo album and digital content like CDs and DVDs.

This also will benefit the author since the cost in the traditional supply chain was unaffordable before and drained a lot of the profit from the author. This new business model will drive the new methodology of printing, with no minimum order or set up fee. Revisions can be made anytime and while turnaround time before was 3-6 weeks, now it becomes 3-6 days. This is truly a matter of convenience and technology that makes this new channel possible.

Discussion

In the past strategic alliance was viewed only as an alternative to merger and acquisition. Pieter De Man (2001) said that the numbers of strategic alliances is reaching the numbers of mergers and acquisitions. This study supports his argument showing that only within the last few years in the printing industry, the number of newly established strategic alliances has outgrown the number of mergers and acquisitions by more than 5%. The numbers are predicted to continue to grow as the companies realized the benefits of strategic alliances. The Printing industry is a technology industry, so the results of this

study are in line with the literature review that the companies in technology industry tend to adopt strategic alliances. All kinds of companies in the printing industry enter into alliances. This is not restricted by the size of employees or the sales revenues. Becoming aligned is a solution that helps companies to streamline process and workflows, develop new products, and create the solutions to offer customers.

The printing companies enter into strategic alliances not only to build networks within the same type of companies. They also have relationships with other industries, for example, healthcare, banking, defense, telecommunications, and so forth.

The case study shows an example of two companies, ColorCentric Corporation and Lulu.com who formed a strategic alliance in the printing environment. Their alliance nature is a contractual agreement which is the most common type of strategic alliance practice. Technology is the most common reason companies engage in alliances and it is the main reason ColorCentric Corporation and Lulu.com entered into strategic alliance.

This case study enhances an understanding of the alliance practice and outlines the benefits each partner gains from partnering.

Chapter 6

Summary and Conclusion

There are six types of alliances which are: outsourcing, contract, joint venture, equity stake, partial acquisition and merger and acquisition. Within the printing industry, the study found four types of alliances; outsourcing, contract, joint venture and merger and acquisition. Equity stake and partial acquisition rarely occur due to the companies preferring to acquiring whole assets.

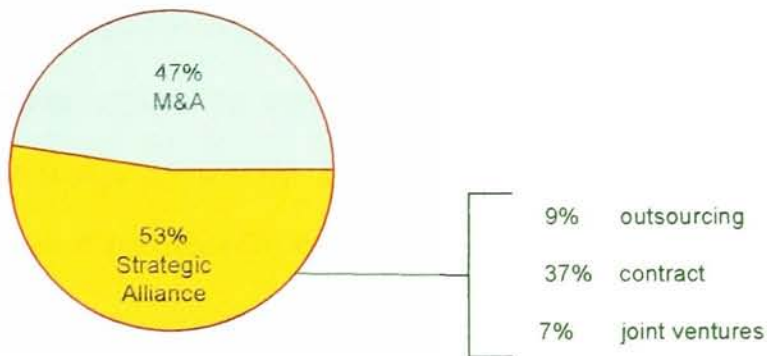


Figure 14. M&A VS SA

Figure 14 concludes that strategic alliances include outsourcing, contract and joint venture (53%). Alliances may result in Merger and acquisition at one point. Merger and acquisition is found in 47% of all alliances, and most are established by bigger print service providers that acquired smaller print service providers.

There are many types of companies who enter into alliances; manufacturers, print service providers, publishers, non-printing related companies and others. The print

service providers account for 37%, including industries in the printing and related support activities, subsector print products, such as newspapers, books, labels, business cards, stationery, business forms, and other materials, and perform support activities, such as data imaging, platemaking services, and bookbinding. The number shows that manufacturers accounts for 22%. Manufacturers include chemical, paper, machinery, and plastic and rubber products manufacturing. The service types of companies account for 15% covering administrative and support services like copy center, quick printing services; professional, scientific and technical services like, direct mail advertising, custom computer programming. Non-printing related account for the least of 6%.

The main reasons for each company's partnering with each other are to primarily obtain benefits from a partner. Having access to partner's technology is the most common reason for companies to become involve in alliances. For example, printing machine and equipments, software and applications, advanced web-based document-automation, and Internet-enabled print solution. The second common reason is to support the growth and expansion strategy of the company in terms of size and revenues. The third common reason is to add more products and services in their product portfolio. Other reasons are to enhance marketing and promotion, research and development, global penetration, and manufacturing capability.

A strategic partnership is where firms depend upon each other and neither can succeed in a given business alone. A Strong partnership between ColorCentric Corporation and Lulu.com, where trust is key and relationship is maintained by a strategic alliance contract, bring them countless benefits. ColorCentric Corporation

provides state of the art equipment to support Lulu.com business and Lulu.com provides the web-based tool application to customers.

Recommendations for further investigation

This study proves that there are tremendous amounts of inter-firm relationships occurring in the printing industry. The printing industry involves shifting technology, and technology firms tend to engage in strategic alliances. Merger and acquisition has enormous impact on the printing industry. Even though some experts believe that merger and acquisition is not a real strategic alliance, big companies in the printing industry engage in merger and acquisition as a way to grow their business. Further investigation might consider the future established alliances to understand if the number of alliances will continue to increase. How will the existing alliances shape the industry in the future? What would be the next step for successful companies who enter into alliances?

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Appendices

Coding Sheet (Appendix A)

Company Profile	
Who is/are the partners	
Size	
Types of alliances	
Purposes/Goals	
Partners' location US/Overseas	

Interview Questions (Appendix B)

Partners

1. How do you determine which companies may be good candidates to form a partnership with?
2. Describe who you have strategic alliances with
3. Is there any difference among them?
4. How many partners do you ally with?
5. How many types of partnerships or alliances exist in your organization?
6. What is the number of percentage that your clients are also partners?
7. What were the primary reasons to establish strategic alliances with each?
8. What are the typical types of business that your partners are in?
9. Is the partnership being formed to further the individual goals of each partner or a shared goal?
10. How do you implement your partners in the workflow process?
11. What is the size of the investment in your partnership?
12. What kind of contract or agreement do you have with your partners?
13. Do you ever encounter problems dealing with partners, how do you handle?
14. Is it possible that your organization will integrate or acquire the partners' company?

Relationship

15. How is the relationship maintained with your partners during the course of the contract?
16. How important is trust in strategic partnerships?
17. How do you create and maintain trust in your partner organization?
18. How often do your partners or clients visit the site?

Performance

19. How do you evaluate the performance of your company with your partners?
20. What makes an alliance to be successful?
21. What are you hoping to do or improve in the future?

Summary of the Roundtable (Appendix C)

Overview

The author attended the Xerox Aspiring Author award ceremony at Harold Washington Library Center in Chicago on 13 September 2005. Anne Mulcahy, Chairman and CEO of the Xerox Corporation, gave a brief speech detailing that Xerox has partnered with Lulu.com.com and ColorCentric, and revealed the digital book publishing process from start to finish: “The lines between manufacturing, marketing and distribution are blurring. Successful digital book manufacturers are running 24/7, with Web-based ordering, automated file preparation, printing and binding. Plus marketing and editing services” (Mulcahy, 2005).

Behind all these revolutions are emerging technology: the latest digital systems, software and services. Automated book manufacturing workflow systems help customers develop successful business models. There’s a vast market opportunity in books on demand. Mulcahy also referred in her speech to Frank Romano of Rochester Institute of Technology, who says that there were 200,000 new book titles published last year; 30 percent of them were printed in quantities of less than 100, and by 2010 it could reach 50 percent.

The author also attended the private informal roundtable after the ceremony. The keynotes were Andrew Paige from Lulu.com, John Lacagnina from ColorCentric, and

John Conley from Xerox. They gathered to discuss what they do and how they have developed this new business model based on their tight strategic partnerships.

Roles of Each Partner

John Lacagnina presented ColorCentric Corporation as specialists in ultra short run manufacturing or production, and publish many thousands of books per month for Lulu.com. The average size of an order is 20 pages. Their business is the business of integrating technology from their partners so that they have an automated process. Once the users click a button, the order shows up in Docutech iGEN3 correctly formatted, correctly post, and correctly color managed. The XML data stream makes its way to a working process and produces a book in the manufacturing cell, and prints, binds, cuts and packs with one operator in that cell. ColorCentric do not consider themselves as a printer; instead they view themselves as a software company that integrates their application with Lulu.com. They are also strictly using Xerox equipment.

Andrew Paige, Lulu.com manager, has a background in book publishing and has been involved with print on demand for a long time. He believes that what they deal with is intellectual property, and that all the aspects of it are wonderful, embracing successful business. This business model can maximize cash flow whilst minimizing inventory. The next big challenge is distribution and how both traditional and print-on-demand will merge in the marketplace. Lulu.com has strong partnerships with ColorCentric and Xerox providing the highest quality platform.

John Conley, Vice President, Publishing Graphic Communications PSG Marketing from Xerox, has been in the book business for 27 years. Over the last 10 years he has been involved with the digital print technology. Xerox develops software,

engineering processes, and enables a new distribution channel. Conley said, “Xerox has been after this since the 1990s as part of enabling pace and technology to make this thing happen. The software makes it inexpensive to produce one less expensively than Donnelley produces an order of 5,000” (Conley, 2005).

The convergence of this process is important to Xerox. This is no longer a new emerging channel, but has become large enough and established enough to be changing the face of publishing. There used to be publishers who handled this four years ago, before the huge consolidation. There were hundreds of trade publishers and the channel used to be there for many more authors. The huge consolidation has squeezed the market down to four major publishers. Xerox has been after this for a long time, working very closely with ColorCentric and Lulu.com. They are concerned about what needs to be done to make the emerging voice of the author greater. Meanwhile, Lulu.com publishes more books, and ColorCentric’s business continues to grow.

Distribution Channel

All experts agreed that this is a revolution in the distribution channel, allowing new types of business to develop. John Conley stated that this demand has always been there, and authors will always search for new ways to distribute. This technology enables new authors to come forward who may eventually end up distributing millions of copies.

Product distribution always changes. Xerox works with ColorCentric and Lulu.com because enabling this model is part of what Xerox technology does. Being constantly involved with what their partners need, Xerox can provide technology to make this model possible.

John Conley further argued that the problem for big publishers is that the revenue stream for the traditional distribution channel that large publishers utilize is stagnant. Since traditional distribution is not growing and another publishing engine has emerged, big publishers will find a way to participate in the new channel or market. In another case, they might consider shrinking because of no real unit growth in their baseline business. John Conley believes that we will see the way they utilize this because of demand and what they have to produce, but at some point if big publishers are out of bestsellers, they will have to either exit that business or find business somewhere else. There will have to be a methodology to develop this. There already appear to be authors who develop out of this and go from quantities like 5–10,000 copies, to 15–100,000 copies. Tom Clancy actually qualifies as one of this people. He started by printing 2,000 copies of his first book, and later printed 5,000 per week for several weeks.

John Lacagnina argued that this is not a new supply chain, but rather a shortening of the existing one, which would benefit people who cannot use the existing supply chain. He compared the situation to an eBay type of supply chain, using the analogy that if users have family history or an old story to tell, they can put it on eBay to make business.

Copyright

Copyright and legal issues are sensitive when it comes to how to control digital content, where the Internet makes it so much easier to steal other people work without the authors getting the recognition they deserve.

During conversation, some attendees at the roundtable raised questions of copyright and plagiarism; since the process of publishing is done automatically it is hard

to monitor. The phenomenon of piracy on the Internet is actually similar to the massive impact there has been upon the music industry.

Andrew Paige responded to this matter, insisting that users register copyright under their own name so that they will have federal protection and access to the federal court. It is also possible to use a form of technology where the author of a piece of writing can watermark their own file so at least it shows up as their intellectual property.

John Conley added that property has been there for all sizes of publishers, and continues to be there. Plagiarism is not going to go away while the Internet makes it even easier. However, there is software out there now that university professors use to track information in submitted papers and measure this against other published materials.

Market Opportunities

This strategic alliance among partners taps into undiscovered demand and opens up new markets and new ways of doing things. The experts very much agreed on this and each offered their ideas of what might happen in the near future.

Frank Cost, a professor at Rochester Institute of Technology, addressed the point about how the convenience of this new model facilitates the market without taking revenue from the printing industry.

I have a son who goes to school in NYC, and he goes crazy for the Crystal Gate in Central Park. He took his photographs, added them to a collection, laid them out in Microsoft Word photobook, published it on Lulu.com, and it was published a week after the gate went up, so the book existed before the gates were even taken down . . . I really believe this kind of thing is going to start happening all over the place.

Frank Cost also told another story of a family friend who had recently died unexpectedly. They could not attend the funeral but they had the collection of photographs of the time they were all in graduate school together. The photos were scanned and made into a published photobook for the family to look at after the funeral.

John Conley believes that there is also change in the definition of what people consider to be a book: "I am 50 years old. When I think of a book I think of retail, but with this new channel of electronic content, it's going to refine what we think of as a book – I call it personal publishing." Today, people can create a book in Microsoft Word, go out and take pictures with a digital camera, and work on the photos in Photoshop. There's a burgeoning business for putting out personal photo albums where users send their material online, and the album will be put together for them.

There was an interesting point raised during the conversation by an attendee: "Traditional publishers are not in the business of making books, they are actually investing in media properties that have long-term value." The fact that manufacturing and distributing this property is inconvenient to them underlines that media management is what traditional publishers are all about. New publishing methods enable the same kind of activities but for much smaller markets.

Andrew Paige of Lulu.com agreed with this position, and added that lots of money has been invested between them and Xerox to get to this point. They are able to publish overnight, which was never possible five years ago. There is the opportunity right underneath the demand curve that this technology enables people to meet, not just in self-publishing but through other opportunities too. Andrew Paige also suggested that market

demographics have evolved, which affects the business as well. More people can speak English and more people are sharing their life story.

John Lacagnina supports the point:

People do a one-year blog with the touch of a button. We can perfectly bind a one-year blog of more than 500 pages. How many people even knew blogs five years ago? All of a sudden there's a new market for blogs, and guess what, there's a new market for printing blogs. I believe there are hundreds of applications like this and we don't even know where it's coming from. With self-publishing as long as you can make money with one, we believe it's going to be published.

Other examples of what are considered to be of value to users are the wedding book, school yearbook, sports events, and the classroom project; there's even a company that creates a site for teacher to sign up to make their own materials.

One attendee suggested that the largest book publishing companies in the world are only interested in mass media, and are only interested in publishing titles that will continue to make money. They are interested in these types of big-money transactions, and because small to medium-sized markets are not efficient enough they will move on. The authors succeeding in self-publishing will always, at some point, want to move up to the big leagues to have that access to that kind of marketing and distribution.